

I. AMENDMENTS TO THE CLAIMS

1. (currently amended): A vaso-occlusive composition consisting of a vaso-occlusive member selected from the group consisting of one or more vaso-occlusive coils, one or more filters, ~~one or more retention devices~~ and combinations thereof; and a bioactive material selected from the group consisting of fibrin; polyethylene glycol derivatives; thrombin-coated gelatin granules; balloons coated with iron microspheres; trace metals; thrombus-stabilizing molecules; at least one cytokine; extracellular matrix material; DNA; RNA; functional fragments of DNA, RNA, cytokines or extracellular matrix materials; and combinations thereof, wherein combinations of bioactive materials are not contained in separate layers and wherein the vaso-occlusive member is selected from the group consisting of one or more vaso-occlusive coils, one or more filters, ~~one or more retention devices~~ and combinations thereof.

2. (canceled)

3. (previously amended): The composition of claim 1, wherein the bioactive material is at least one cytokine.

4. (currently amended) The composition of claim 3, wherein the cytokine is selected from the group consisting of platelet derived growth factor (PDGF), basic fibroblast growth factor (bFGF), vascular endothelial cell growth factor (VEGF) and transforming growth factor beta (TGF-beta).

5. (original): The composition of claim 1, wherein the material comprises a trace metal.

6. (original): The composition of claim 5, wherein the trace metal comprises copper.

7. (original): The composition of claim 1, wherein the material comprises a thrombus-stabilizing molecule.

8. (original): The composition of claim 7, wherein the thrombus-stabilizing molecule is Factor XIII or functional fragments thereof.

9. (original): The composition of claim 7, wherein the thrombus-stabilizing molecule is plasminogen activator inhibitor-1 (PAI-1) or functional fragments thereof.

10. (original): The composition of claim 7, wherein the thrombus-stabilizing molecule is T₂-antiplasmin or functional fragments thereof.

11. (previously amended): The composition of claim 1, wherein the bioactive material is adsorbed to the vaso-occlusive member.

12. (canceled)

13. (canceled)

14. (original): The composition of claim 1, wherein the vaso-occlusive member is plasma treated.

15. (original): The composition of claim 1, wherein the vaso-occlusive member is subjected to ion implantation.

16. (original): The composition of claim 1, wherein the vaso-occlusive member is microtextured.

17. (previously amended): The composition of claim 11, wherein the vaso-occlusive member includes a tie-layer between the vaso-occlusive member and the bioactive material.

18. (canceled)

19. (original): A method of occluding a vessel comprising administering to a subject in need thereof a vaso-occlusive composition according to claim 1.

20. (canceled)

21. (currently amended): The method of claim 19, wherein the cytokine is selected from the group consisting of platelet derived growth factor (PDGF), basic fibroblast growth factor (bFGF), vascular endothelial cell growth factor (VEGF) and transforming growth factor beta (TGF-beta).

22. (original): The method of claim 19, wherein the trace metal is copper.

23. (original): The method of claim 19, wherein the thrombus-stabilizing molecule is selected from the group consisting of Factor XIII, α_2 -antiplasmin, plasminogen activator inhibitor-1 (PAI-1), combinations thereof and functional fragments thereof.

24. (original): The method of claim 19, wherein the vessel is an aneurysm.

25 to 30. (withdrawn)

31. (previously amended): A vaso-occlusive composition comprising a vaso-occlusive coil, a liquid embolic material and an additional bioactive material selected from the group consisting of at least one cytokine; extracellular matrix material; DNA; RNA; functional fragments of DNA, RNA, cytokines or extracellular matrix material; and combinations thereof, wherein at least one of the bioactive materials is attached to the vaso-occlusive coil.

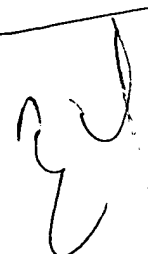
32. (previously amended): The vaso-occlusive composition of claim 31, wherein the liquid embolic material is a particulate material selected from the group consisting of microspheres, granules and beads.

33. (canceled).

34. (previously amended): The vaso-occlusive composition of claim 31, wherein the vaso-occlusive coil is absorbable.

35. (previously amended): The vaso-occlusive composition of claim 32, wherein the particulate material is absorbable.

36. (original): A method of occluding a vessel comprising administering to a subject in need thereof a vaso-occlusive composition according to claim 31.



37. (new): A vaso-occlusive composition comprising a vaso-occlusive member; and thrombin-coated gelatin granules or balloons coated with iron microspheres.